REMARKS

Claims 1-24 are all the claims presently pending in the application. Claims 1, 5, 6, 10, 13, 18-20 have been amended. Claim 24 has been added.

It is noted that the claim amendments are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-7 and 10-21 stand rejected under 35 U.S.C. §102(b) as allegedly being unpatentable over Engle et al. (U. S. Patent No. 5,541,622). Claims 8-9 and 22-23 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Engle in view of the alleged admitted prior art (AAPA) (Application at page 1, line 13-page 3, line 13.

These rejections are respectfully traversed in the following discussion.

I.   THE CLAIMED INVENTION

The claimed invention (e.g., as recited in claim 1) is directed to a controller for controlling a cursor, including an identifying module for identifying at least one of a first period when a cursor is in motion and a second period when the cursor is not in motion, and a calibrating module for sampling an input parameter signal to detect a hands-off condition using a first hands-off test during the first period and a second hands-off test, different than the first hands-off test, during the second period, and calibrating the input parameter signal when a hands-off condition is detected.

Conventional cursor control systems attempt to detect cursor drift (e.g., due to temperature or other environmental changes) and remove it from the significant signal. To do this, a hands-off condition may be identified from the properties of the signal itself by setting a testing time for identifying the hands-off period to one compromise value. However, cursor drift continues to be a nuisance (Application at page 3, lines 4-12).

The claimed invention, on the other hand, includes a calibrating module for sampling an

input parameter signal to detect a hands-off condition using a first hands-off test during the first period and a second hands-off test, different than the first hands-off test, during the second period, and calibrating the input parameter signal when a hands-off condition is detected. This helps to allow the claimed invention to provide an improved control of cursor drift (Application at page 3, lines 17-21; page 9, line 20-page 10, line 9).

II.   THE ALLEGED PRIOR ART REFERENCES

A.   Engle

The Examiner alleges that Engle teaches the claimed invention of claims 1-7 and 10-21. Applicant submits, however, that there are features of the claimed invention which are neither taught nor suggested by Engle.

Engle discloses a miniature mouse joystick apparatus which includes an integrated switch means coupled to an actuator assembly for detecting presence of a user's fingertip contacting the actuator assembly (Engle at col. 13, lines 7-9).

However, Engle does not teach or suggest "*a calibrating module for sampling an input parameter signal to detect a hands-off condition using a first hands-off test during said first period and a second hands-off test, different than said first hands-off test, during said second period, and calibrating said input parameter signal when a hands-off condition is detected*", as recited, for example, in claim 1 and similarly recited in claims 10, 18 and 20. As noted above, this helps to allow the claimed invention to provide an improved control of cursor drift (Application at page 3, lines 17-21; page 9, line 20-page 10, line 9).

Clearly, these features are not taught or suggested by Engle.

Indeed, the Examiner assumes, and repeatedly states, that the conditions "user touches stick" is equivalent to "user controls cursor" which is equivalent to "cursor is in motion". In fact these three conditions are <u>all independent</u> - - none of them necessarily imply any of the others.

In a perfectly operating system the cursor would only move when the stick was touched, but the claimed invention is of interest in imperfect (i.e. real) systems where the cursor may move even when the stick is not touched. The Examiner, however, chooses to assume that the

system's drift control is <u>perfect</u> (pg 4 lines ca..9 ff), which is <u>completely unrealistic and unreasonable</u>. Erroneous calibrations may occur, the cursor may move when the stick is untouched, or fail to move (properly or improperly) when the stick is touched.

An objective of the invention is to minimize such occurrences and recover from them as quickly as feasible, but <u>perfection cannot be assumed</u>. Engle assumes that the switch (or capacitive sensor) in the stick is a perfect touch detector, operating well below the threshold of sensitivity of the stick. The inventors, however, have found this to be an unrealistic assumption. In any case, the inventors make no such assumption, and the three conditions listed above are independent, and <u>Examiner's logic fails</u>.

Indeed, the Examiner again attempts to rely on col. 3, line 64 to col. 4, line 10 and col. 6, line 64 to col. 7, line 2 in Engle to support his position. However, this is clearly unreasonable.

Indeed, as noted above, Engle simply discloses a miniature mouse joystick apparatus which includes an integrated switch means coupled to an actuator assembly for detecting presence of a user's fingertip contacting the actuator assembly (Engle at col. 13, lines 7-9).

Nowhere in this passage or anywhere else does Engle teach or suggest <u>a calibrating module for sampling an input parameter signal to detect a hands-off condition using a first hands-off test during the first period and a second hands-off test, different than the first hands-off test, during the second period, and calibrating the input parameter signal when a hands-off condition is detected.</u>

Therefore, Applicant respectfully submits that Engle clearly does not teach or suggest each and every feature of the claimed invention. Therefore, the Examiner is respectfully requested to withdraw this rejection.

B. AAPA

The Examiner alleges that Engle would have been combined with the AAPA to form the invention of claims 8-9 and 22-23. Applicant submits, however, that these references would not have been combined and even if combined, the alleged combination would not teach or suggested each and every element of the claimed invention.

The AAPA discloses a conventional cursor control system which attempts to detect cursor drift (e.g., due to temperature or other environmental changes) and remove it from the significant signal. To do this, a hands-off period may be identified from the properties of the signal itself by setting a testing time for identifying the hands-off period to one compromise value. However, the AAPA teaches that **cursor drift continues to be a nuisance** (Application at page 3, lines 4-12).

Applicant respectfully submits that these references would not have been combined as alleged by the Examiner. Indeed, these references are completely <u>unrelated</u>, and no person of ordinary skill in the art would have considered combining these disparate references, <u>absent impermissible hindsight</u>.

In fact, Applicant submits that <u>these references do not include any motivation or suggestion</u> to urge the combination as alleged by the Examiner. Indeed, these references clearly do not teach or suggest their combination.

Therefore, Applicant respectfully submits that one of ordinary skill in the art would not have been so motivated to combine the references as alleged by the Examiner. Therefore, the Examiner has <u>failed to make a prima facie case of obviousness</u>.

Moreover, Applicant submits that neither Engle, nor the AAPA, nor any alleged combination thereof, teaches or suggests suggest "*a calibrating module for sampling an input parameter signal to detect a hands-off condition using a first hands-off test during said first period and a second hands-off test, different than said first hands-off test, during said second period, and calibrating said input parameter signal when a hands-off condition is detected*", as recited, for example, in claim 1 and similarly recited in claims 10, 18 and 20. As noted above, this helps to allow the claimed invention to provide an improved control of cursor drift (Application at page 3, lines 17-21; page 9, line 20-page 10, line 9).

Clearly, the AAPA does not teach or suggest this feature.

Indeed, Applicant would <u>again</u> point out that the AAPA simply teaches **setting a testing time for identifying the hands-off period to one compromise value** (Application at page 3, lines 4-12).

The Examiner's assertions are completely unreasonable. Nowhere does the AAPA teach teach or suggest <u>a calibrating module for sampling an input parameter signal to detect a hands-off condition using a first hands-off test during the first period and a second hands-off test, different than the first hands-off test, during the second period, and calibrating the input parameter signal when a hands-off condition is detected,</u>

Therefore, the AAPA clearly does not make up for the deficiencies in Engle.

Therefore, Applicant submits that these references would not have been combined and even if combined, the combination would not teach or suggest each and every element of the claimed invention. Therefore, the Examiner is respectfully requested to withdraw this rejection.

III.   FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-24, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a <u>telephonic or personal interview.</u>

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,

Date: October 31, 2007   /Phillip E. Miller/
                                            Phillip E. Miller, Esq.
                                            Registration No. 46,060

McGinn IP Law Group, PLLC
8321 Old Courthouse Road, Suite 200
Vienna, VA 22182-3817
(703) 761-4100
Customer No. 21254